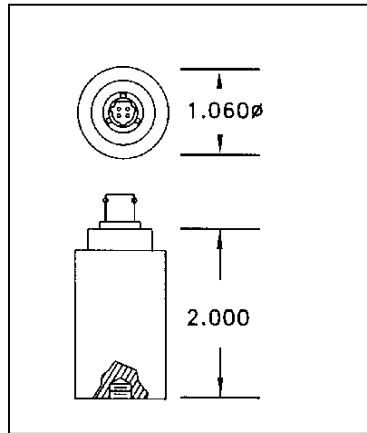


- *Vibration & Shock
- *Low Impedance Output
- *Sensitivity 2,000 mV/g
- *Electrical Isolation
- *Hermetically Sealed
- *Battery Power (+12 VDC)

The Model 947M3 Piezoelectric Accelerometer provides an electrical output of 2,000 millivolts per g over a frequency band of 2 Hz to 2,000 Hz. It is designed for measurement of the low level, low frequency signals encountered in many industrial applications involving rotating machinery.

The sensor incorporates a military-style hermetic connector to permit long-term operation in the most demanding industrial environments. Internal electrical isolation minimizes ground loop problems from noise currents. The 947M3 will operate from DC power sources ranging from 10 to 30 VDC. The low power requirement allows operation from battery sources for portable or remote applications. *Consult the factory for customized versions of this sensor.*



Output Connector Pin Functions:

- Pin A + DC Power
- Pin B Common
- Pin C Signal Out
- Pin D Common

Accessories Supplied:

- (1) Mating Connector (PT06-8-4S)
- (1) 1/4-28 x 0.500" L Mounting Stud
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

*Optional cable assemblies are available

Specifications

Transfer / Electrical	947M3
Voltage Sensitivity ¹	2,000 mV/g +/-10%
Vibration Range	+/-1.75 g Max.
Frequency Linearity ²	+/-1 dB Max 2 Hz To 2,000 Hz
Phase Shift	6 Deg Max @ 2.5 Hz
Transverse Sensitivity	6% Max
Amplitude Linearity	+/-1.0% (BFSL)
Electrical Noise	0.0003 g Equiv., Nom.
Avg Temp Coeff of Sensitivity	0.05 % / Deg F
Output Bias Voltage	5.0 +/-1 VDC
Output Impedance	75 Ohms Max.
Isolation Resistance	100M Ohm Min., 50 VDC
Power Requirements	12 VDC @ 4.0 mA, Nom.
Environmental	
Vibration Limit	50 g Max (Sine)
Shock Limit	100 g Max.
Temperature Range	-40 To +250 Deg F (-40 To +121 Deg C)
Humidity ³	0 To 100% R.H.
Base Strain Sensitivity	0.005 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.005 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.02 g RMS (Equiv @ 124 dB SPL)
Physical	
Configuration	Single-Ended Compression
Size	1.060 In. Dia. x 2.000 In. H (27.0 mm Dia x 50.0 mm H)
Weight	6.0 Oz (170 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	MS3113H-8-4P or Equiv. (Mates with PT06-8-4S)
Mounting	0.250-28 UNF-3A Tapped Base

NOTES:

- ¹ At +75 Deg F, 10g Peak, 100Hz; 12 VDC Power Source
- ² Referenced to Sensitivity @ 100 Hz.
- ³ With Connector Protected or Sealed, Unit is Hermetically Sealed.

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